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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/781,519 | 02/17/2004 | Tae-Hoon Kim | 678-1179 (P11002) | 2931 |
| 28249 | 7590 | 03/23/2005 | EXAMINER | |
| DILWORTH & BARRESE, LLP 333 EARLE OVINGTON BLVD. UNIONDALE, NY 11553 | | | WALSH, DANIEL I | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2876 | |

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 10/781,519 | Applicant(s) KIM, TAE-HOON | |
| | Examiner Daniel I. Walsh | Art Unit 2876 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-5, 10-14, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ilan et al. (US 6,668,081).

Re claim 1, Ilan et al. teaches a storage for storing programs and symbols linked to the programs; a display for displaying the operation state of a program when the program is invoked; a user interface for sensing an external contact; and a controller for detecting a figure represented by a signal sensed at the user interface according to a path in which the external contact is made and, in the presence of a symbol matching the figure, invoking a program corresponding to the symbol from the storage (FIG. 2A, Fig. 3, FIG. 4, FIG. 6, and col 1, lines 40+). Though Ilan et al. teaches library 66 for storing symbols, Ilan et al. is silent to storage for programs. However the Examiner notes it's well known and conventional that the programs are stored on the computer as well. Therefore, it is understood that both the program storage and symbol storage is stored on the computer itself (storage means such as a hard drive, memory, etc., as is conventional in the art, for ease and reliability of storage). The computer display is understood to display the operation state of the program (launched or not). The touchpad pointing device 12/12' is a user interface for sensing external contact. FIG. 3 and FIG. 5 teach the limitations of

detecting a figure sensed at the user interface, matching the figure, and launching a program corresponding to the image. Though silent to a controller it is obvious that such means are executed by the computer, and as such, a controller, such as a microprocessor, for example, which is well known for executing computer instructions/programs.

Re claim 2, though Ilan et al. is silent to a program execution table, Ilan et al. teaches a library 66 which links symbols to programs to be executed. This is broadly interpreted as a program execution table. Though Ilan et al. is silent to the symbols being mapped to the names of the programs, FIG. 4 illustrates the mapping of symbols to associated programs, and shows that names of programs and symbols are linked. It would be an obvious expedient to link symbols and program names, for identification of programs to be launched that correspond to the symbols.

Re claim 3, though Ilan et al. teaches a library 66 and is silent to more than one table, the Examiner notes that the use of one large library is functionally equivalent to a plurality of tables. The Examiner notes that one table of symbols and application mapped together appears to perform equally well to a plurality of tables. Since the applicant has not disclosed that a plurality of tables solves any stated problem or is for any particular purpose, the selection of one table or a plurality of tables, would have been an obvious matter of design variation, well within the skill in the art, as an alternative means to organize data (multiple tables instead of one table/record).

Re claim 4, Ilan et al. teaches user defined symbols (FIG. 4 and FIG. 7).

Re claim 5, Ilan et al. teaches a touch pad user interface (FIG. 2A).

Re claim 10, though Ilan et al. is silent to a predetermined matching range, it is well known and conventional in the art of figure/character/gesture recognition that predetermined

tolerances are permitted between stored and input figures/characters/gestures, in order that inputs can be recognized/matched to those stored in memory, because it is not expected for a user to input an identical input each time, but only one that is close enough. This is well known and conventional in the art.

Re claim 11, the limitations have been discussed above re claim 1.

Re claim 12, the limitations have been discussed above re claim 2.

Re claim 13, the limitations have been discussed above re claim 3.

Re claim 14, the limitations have been discussed above re claim 4.

Re claim 16, the limitations have been discussed above re claim 10.

Re claim 17, though Ilan et al. is silent to storing and deleting, the Examiner notes that it is well known and conventional that any information input to a computer/processing device is inherently stored in memory (buffer, hd, ram, etc). Though silent to deleting the Examiner notes that it is common practice in computer programming to deallocate and delete information from memory once its used. If such deallocating and deleting does not occur, the memory of the computer/program would grow and not stop. Accordingly, it would have been an obvious expedient to delete data in order to free up memory to prevent memory overflow. Such means is well known and conventional within computer programming.

2. Claims 6-7 are is rejected under 35 U.S.C. 103(a) as being unpatentable over Ilan et al., as discussed above, in view of Gillespie et al. (US 2005/0024341).

The teachings of Ilan et al. have been discussed above.

Ilan et al. teaches a touch pad, but is silent to a touch screen. Re claim 7, Ilan et al. is silent to a membrane overlaying keys.

Gillespie et al. teaches a touch screen, usable as a conventional touch pad (among other things) (FIG. 3).

At the time the invention was made, it would have been obvious to an artisan of ordinary skill in the art to combine the teachings of Ilan et al. with those of Gillespie et al.

One would have been motivated to do this provide a touch screen with additionally functionality into the form factor of a conventional touch pad, for convenience.

Re claim 7, though Gillespie et al. teaches that there can be keys on the screen (FIG. 4), Gillespie et al. is silent to a membrane on top of the keys. The Examiner broadly interprets the touch pad itself as a membrane (touch sensitive) that is on the keys. Additionally, the Examiner notes an alternative interpretation of a membrane is nothing more than a protective layer. Accordingly, the use of protection layers on top of a touch screen (where keys are displayed) is well known and conventional in the art (PDAs, cellular telephones, etc. can be equipped with protective membranes). One would have been motivated to use this type of membrane, as a means to protect the touch sensitive areas.

3. Claim 7 is alternatively rejected under 35 U.S.C. 103(a) as being unpatentable over Ilan et al., as discussed above, in view of Mayoraz et al. (US 2004/0263487).

The teachings of Ilan et al. have been discussed above.

Ilan et al. is silent to the user interface being a membrane overlaying keys.

Mayoraz et al. teaches a grid on keys to sense different inputs and respond accordingly (abstract and FIG. 4)

At the time the invention was made, it would have been obvious to an artisan of ordinary skill in the art to combine the teachings of Ilan et al. with those of Mayoraz et al.

One would have been motivated to do this to have a space saving means of detecting input by the user.

4. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ilan et al., as discussed above, in view of Wong (US 2002/0063678).

The teachings of Ilan et al. have been discussed above.

Ilan et al. is silent to displaying the symbol linked to the program for a predetermined time and then invoking the program.

Wong teaches a portable computer where during a user interface input of characters, where once the characters are recognized, they are displayed on the screen for verification and or modification (paragraph [0027]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings Ilan et al. with those of Wong.

One would have been motivated to do this to provide visual confirmation of the input for the user.

5. Claims 9 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ilan et al., as discussed above, further in view of Handbook for Palm m100 Series Handhelds (www.palmone.com/us/support/handbooks/m125_ug_US.pdf), hereinafter Palm.

The teachings of Ilan et al. have been discussed above.

Ilan et al. is silent to launching a second program when a symbol linked to a different program during an ongoing program, while stores information about the operation state of the ongoing program and running the different program.

Palm teaches such limitations (page 43, 4th paragraph).

At the time the invention was made, it would have been obvious to an artisan of ordinary skill in the art to combine the limitations of Ilan et al. with those of Palm.

One would have been motivated to do this in order to be able to switch between applications without losing data, as the data is saved in the background to the application, without closing it, to allow for easy and fast switching between programs.

Additional Remarks

6. The Examiner notes that the effective filing date never moves to the foreign priority date unless that date is perfected by meeting all of the requirements for claims for priority and also a sworn English translation. As a sworn English translation is not present in the file, the Examiner has applied the art of Mayoraz et al.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Yoshida et al. (US 5,502,803), Berman et al. (US 5,550,930), Dupouy (US 6,057,854), Han et al. (US 6,147,314), Kiraly et al. (US 6,249,606), Hawkins et al. (US 6,295,372), Ilan et al. (US 6,298,146 and 6,298,147), Smethers (US 6,463,304), Gannage et al. (US 6,504,956), Lunsford (US 6,507,336), Van Kleeck (US 6,539,113), Wong et al. (US 6,636,203), Baker et al. (US 2002/0163544), Izumi (US 2003/0099398), Hung-yi (US 2003/0191960), Tomizawa et al. (US 2004/0001051), Kim (US 2004/0188529), Blount et al. (US 2004/0223647), Chang et al. (US 2004/0240739), and Zhen et al. (US 2005/0041865).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel I. Walsh whose telephone number is (571) 272-2409. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel I Walsh
Examiner
Art Unit 2876



Daniel Walsh